

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           **Claim 1 (currently amended):** A radio communications  
2   apparatus having a transmission power control feature for  
3   controlling the transmission power of said apparatus by  
4   using a transmission power control bit transmitted from a  
5   distant station to the apparatus, said apparatus  
6   comprising:

7           a communication state detector which detects a  
8   communication state based on the reception power of a  
9   received signal transmitted from the distant station to  
10   said apparatus; and

11          a transmission power control step range changer which  
12   ~~varies the~~ calculates a variable power step amount of a  
13   transmission power control step ~~corresponding to~~ based on  
14   the transmission power control bit and also based on the  
15   detected communication state, wherein

16          said apparatus increases or decreases a transmission  
17   power of a transmitted signal to the distant station by the  
18   ~~varied~~ calculated power step amount in response to the  
19   transmission power control bit received from the distant  
20   station.

1           **Claim 2 (original):**       The radio communications  
2   apparatus according to claim 1, wherein said communication  
3   state detector has a reception power change detector which  
4   detects a change in reception power in a local station.

1           **Claim 3 (original):**       The radio communications  
2   apparatus according to claim 1, wherein said communication  
3   state detector has a distant station transmission power  
4   change detector which detects a change in transmission  
5   power in a distant station.

1           **Claim 4 (original):**       The radio communications  
2   apparatus according to claim 1, wherein said communication  
3   state detector has a control state detector which detects  
4   the control state of the local station.

1           **Claim 5 (original):**       The radio communications  
2   apparatus according to claim 1, wherein said communication  
3   state detector has a local station transmission power  
4   change detector which detects a change in transmission  
5   power in the local station.

1           **Claim 6 (original):**       The radio communications  
2   apparatus according to claim 1, wherein said communication  
3   state detector has a transmission power control bit change

4 detector which detects a change in said transmission power  
5 control bit.

1       **Claim 7 (original):**       The radio communications  
2 apparatus according to claim 2, wherein said reception  
3 power change detector has a reception power comparator  
4 which compares a previous reception power with a current  
5 reception power.

1       **Claim 8 (original):**       The radio communications  
2 apparatus according to claim 2, wherein said reception  
3 power change detector has a fading pitch detector which  
4 detects the fading pitch of reception power.

1       **Claim 9 (original):**       The radio communications  
2 apparatus according to claim 2, wherein said reception  
3 power change detector has a reception power threshold  
4 comparator which compares the reception power with a  
5 predetermined threshold.

1       **Claim 10 (currently amended):**   A transmission power  
2 control method for a radio communications apparatus for  
3 controlling transmission power of the apparatus by using a  
4 transmission power control bit transmitted from a distant  
5 station to the apparatus, said method comprising:

6 the apparatus having a communication state detecting  
7 step which detects a communication state based on the  
8 reception power of a received signal transmitted from the  
9 distant station; ~~and~~

10 the apparatus having a transmission power control step  
11 range changing step which ~~varies the~~ calculates a variable  
12 power step amount of a transmission power control step  
13 ~~corresponding to~~ based on the [[a]] transmission power  
14 control bit[[,]] received by the apparatus from the distant  
15 station[[,]] and also based on the detected communication  
16 state; and

17 said apparatus increasing or decreasing a transmission  
18 power of a transmitted signal to the distant station by the  
19 ~~varied~~ calculated power step amount in response to the  
20 transmission power control bit.

1 **Claim 11 (currently amended):** The transmission power  
2 control method for radio communications apparatus according  
3 to claim 10, wherein said communication state detecting  
4 step has a reception power change detecting step which  
5 detects a change in reception power in a local station,  
6 wherein said transmission power control range changing step  
7 ~~changes~~ calculates the variable power step amount  
8 ~~transmission power control range~~ depending on the detected  
9 change in reception power.

1           **Claim 12 (currently amended):** The transmission power  
2 control method for radio communications apparatus according  
3 to claim 10, wherein

4           said communication state detecting step has a distant  
5 station transmission power change detecting step which  
6 detects a change in transmission power in a distant station  
7 and a reception power change detecting step which detects  
8 a change in reception power in a local station, wherein

9           said transmission power control step range changing  
10 step ~~varies~~ calculates the power step amount of the  
11 transmission power control step ~~range~~ depending on the  
12 detected change in transmission power in the distant  
13 station and the detected change in reception power in the  
14 local station.

1           **Claim 13 (currently amended):** The transmission power  
2 control method for radio communications apparatus according  
3 to claim 10, wherein

4           said communication state detecting step has a control  
5 state detecting step which detects the control state of a  
6 local station, wherein

7           said transmission power control step range changing  
8 step ~~varies~~ calculates the power step amount of the  
9 transmission power control step range depending on the  
10 detected control state.

1           **Claim 14 (currently amended):** A transmission power  
2 control method for radio communications apparatus according  
3 to claim 10, wherein

4           said communication state detecting step has a local  
5 station transmission power change detecting step which  
6 detects a change in transmission power in a local station  
7 and a transmission power control bit change detecting step  
8 which detects a change in the transmission power control  
9 bit, wherein

10          said transmission power control step range changing  
11 step ~~varies~~ calculates the power step amount of the  
12 transmission power control step ~~range~~ depending on the  
13 detected change in transmission power in the local station  
14 and the detected change in the transmission power control  
15 bit.

1           **Claim 15 (original):** The transmission power control  
2 method for radio communications apparatus according to  
3 claim 11 or 12, wherein

4           said reception power change detecting step has a  
5 reception power comparing step which compares a previous  
6 reception power with a current reception power, wherein

7           a change in reception power is detected based on the  
8 comparison results of the reception power comparing step.

1           **Claim 16 (original):** The transmission power control  
2 method for radio communications apparatus according to  
3 claim 11 or 12, wherein  
4           said reception power change detecting step has a  
5 fading pitch detecting step which detects the fading pitch  
6 of reception power, wherein  
7           a change in reception power is detected based on the  
8 detected fading pitch.

1           **Claim 17 (original):** The transmission power control  
2 method for radio communications apparatus according to  
3 claim 11 or 12, wherein  
4           said reception power change detecting step has a  
5 reception power comparing step which compares a previous  
6 reception power with a current reception power and a fading  
7 pitch detecting step for detecting the fading pitch of  
8 reception power, wherein  
9           a change in reception power is detected based on the  
10 comparison results of the reception power comparing step  
11 and the detected fading pitch.

1           **Claim 18 (original):** A transmission power control  
2 method for radio communications apparatus according to  
3 claim 11 or 12, wherein

4       said reception power change detecting step has a  
5       reception power threshold comparing step for compares the  
6       reception power with a predetermined threshold, wherein  
7       a change in reception power is detected based on the  
8       comparison results of the reception power threshold  
9       comparing step.

1       **Claim 19 (previously presented):** A computer-readable  
2       recording medium for storing a program for use by a  
3       computer for executing the transmission power control  
4       method for the radio communications apparatus according to  
5       any one of claims 10 through 14.

1       **Claim 20 (new):** A transmission power control method  
2       for controlling a transmission power of a signal  
3       transmitted from a portable mobile device to a base  
4       station, said method comprising the steps of:  
5       detecting information about the reception power of a  
6       signal transmitted from the base station to the mobile  
7       device as received by the mobile device;  
8       calculating a variable power step amount based on both  
9       a transmission power control bit received by the mobile  
10      device from the distant station and the detected  
11      information; and



12           changing a transmission power of a transmitted signal  
13   from the mobile device to the distant station by the  
14   calculated power step amount.